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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,278	11/26/2003	Yun-Fang Chen	3624-0141P	5461
2292	7590	05/18/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			HUNTER, ALVIN A	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			3711	
DATE MAILED: 05/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/721,278	CHEN, YUN-FANG	
	Examiner	Art Unit	
	Alvin A. Hunter	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 April 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) 2,5,6,9,10,14,17,18,21 and 22 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1,3,4,7,8,11-13,15,16,19 and 20 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species II in the reply filed on 4/11/2005 is acknowledged. The traversal is on the ground(s) that the additional species are not a burdensome search. This is not found persuasive because applicant has not shown why the search is not burdensome to the examiner (See MPEP 808.01). The fact remains that such species is patentably distinct. If not, applicant should so state and all claims will be examined on the premise that if one embodiment is found, the other embodiments are obvious variants in light of applicants' admission.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the buffering space being filled with filler as prescribed in claim 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 15, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kingston (USPN 5906550).

Regarding claim 13, Kingston discloses a composite plate for a golf club head comprising at least one metal layer **16** and at least one non-metal layer **12** wherein at least one metal layer and the at least one non-metal layer being laminated (See Entire document). The process used to laminated the layers will not be given patentable weight being that the final product is the same as that of the applicant (product by process).

Regarding claim 15, Figure 3 shows the outermost layer **16** being a metal layer.

Regarding claim 16, Kingston inherently discloses the metal layer having a density smaller than 4.8g/cm³ being that the metal layer is a titanium alloy.

Regarding claim 19, Kinston discloses that combining the two layers comprises applying an adhesive to the surface of the metal layer; therefore, creating a metal layer, first no-metal layer (adhesive), and a second non-metal layer (See Column 6, lines 40 through 48).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niskanen et al. (USPN 5342812) in view of Kingston (USPN 5906550).

Regarding claim 1, Niskanen discloses a club head having a golf club head body made of metal and including a striking plate, at least one recession defined in the golf club head body, and at least one composite plate that may include at least one metal layer or at least one non-metal layer (See Column 28, lines 44 through 61 and Figure 4). It is unclear from Nikanen if the layer can be intermixed (non-metal with metal layer to form composite plate). Kingston discloses a composite plate for a golf club head comprising at least one metal layer **16** and at least one non-metal layer **12** wherein at least one metal layer and the at least one non-metal layer being laminated (See Entire

document). One having ordinary skill in the art would have found it obvious to have a composite plate made of a metal layer and a non-metal layer together, as taught by Kingston, in order to increase the strength of the club head. The process used to laminate the layers will not be given patentable weight being that the final product is the same as that of the applicant (product by process).

Regarding claim 3, Figure 3 of Kingston shows the outermost layer **16** being a metal layer.

Regarding claim 4, Kingston inherently discloses the metal layer having a density smaller than 4.8g/cm³ being that the metal layer is a titanium alloy.

Regarding claim 7, Kinston discloses that combining the two layers comprises applying an adhesive to the surface of the metal layer; therefore, creating a metal layer, first no-metal layer (adhesive), and a second non-metal layer (See Column 6, lines 40 through 48).

Regarding claim 11, Niskanen et al. defines the recession being in the sole portion of the golf club head body.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niskanen et al. (USPN 5342812) in view of Kingston (USPN 5906550) further in view of OFFICIAL NOTICE.

Regarding claim 8, Kinston discloses that heat is used during the adhering step which would allow one having ordinarily skilled in the art to conclude that the adhesive is heat sensitive. Kingston discloses the second non-metal layer being a graphite fiber reinforced composite, in particular epoxy pre-preg tape, but Niskanen et al. in view of

Kingston does not explicitly disclose the graphite reinforced composite being impregnated graphite fabric. OFFICIAL NOTICE is taken that it is old and conventional to employ impregnated graphite fabric into club head. This material is known to improve the strength of the club head; therefore, one having ordinary skill in the art would have found it obvious to employ an impregnated graphite fabric into the composite plate because the material is commonly known and because it is known to improve the strength of club heads.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niskanen et al. (USPN 5342812) in view of Kingston (USPN 5906550) further in view of Okumoto et al. (USPN 5228694).

Regarding claim 12, Nikanen et al. discloses a buffering space between an inner periphery of the recession and an outer periphery of the sole plate (See Figure 4). Nikanen et al. in view of Kingston does not disclose the space being filled with a filler. Okumoto et al. discloses a club head wherein a buffering space between an inner periphery of a recess and outer periphery of the sole plate being filled with a filler (See Abstract). One having ordinary skill in the art would have found it obvious to fill the space with a filler, as taught by Okumoto et al., in order to adjust the centroid of the club head which would adjust the center of gravity of the club head.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kingston (USPN 5906550) in view of OFFICIAL NOTICE.

Regarding claim 20, Kinston discloses that heat is used during the adhering step which would allow one having ordinarily skilled in the art to conclude that the adhesive

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is heat sensitive. Kingston discloses the second non-metal layer being a graphite fiber reinforced composite, in particular epoxy pre-preg tape, but Niskanen et al. in view of Kingston does not explicitly disclose the graphite reinforced composite being impregnated graphite fabric. OFFICIAL NOTICE is taken that it is old and conventional to employ impregnated graphite fabric into club head. This material is known to improve the strength of the club head; therefore, one having ordinary skill in the art would have found it obvious to employ an impregnated graphite fabric into the composite plate because the material is commonly known and because it is known to improve the strength of club heads.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAU
Alvin A. Hunter, Jr.



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